

**In the claims:**

Please amend the claims as follows:

1. **(Currently Amended)** A nucleic acid present in other than its natural environment that encodes a non-aggregating chromo- or fluorescent mutant of an aggregating *Cnidarian* chromo- or fluorescent protein or mutant thereof, **wherein said non-aggregating chromo- or fluorescent mutant comprises a mutation in at least one N-terminal residue of 2, 3, 4, 5, 6, 7, 8, 9, or 10.**

2. **(Previously Presented)** The nucleic acid according to Claim 1, wherein said *Cnidarian* chromo-or fluorescent protein is from a non-bioluminescent *Cnidarian* species.

3. **(Previously Presented)** The nucleic acid according to Claim 2, wherein said non-bioluminescent *Cnidarian* species is an Anthozoan species.

4. **(Previously Presented)** The nucleic acid according to Claim 1, wherein said nucleic acid has a nucleotide sequence identical to a nucleotide sequence of at least 10 contiguous nucleotides in length of SEQ ID NOS:14; 15; 17; 19; 21; and 23.

5. **(Previously Presented)** A fragment of the nucleic acid according to Claim 1.

6. **(Previously Presented)** A construct comprising a vector and the nucleic acid according to Claim 1.

7. **(Previously Presented)** An expression cassette comprising:

- (a) a transcriptional initiation region functional in an expression host;
- (b) the nucleic acid according to Claim 1; and

- (c) and a transcriptional termination region functional in said expression host.

8. **(Original)** A cell, or the progeny thereof, comprising an expression cassette according to Claim 7 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell.

9. **(Previously Presented)** A method of producing a chromo- or fluorescent protein, said method comprising:  
growing a cell according to Claim 8, whereby said protein is expressed; and  
isolating said protein.

10. – 14. **(Canceled)**

15. **(Previously Presented)** In an application that employs a nucleic acid encoding a chromo- or fluorescent protein, the improvement comprising:  
employing the nucleic acid according to Claim 1.

16. **(Previously Presented)** A kit comprising the nucleic acid according to Claim 1.

17. - 20 **(Canceled)**

21. **(Currently Amended)** A nucleic acid present in other than its natural environment that encodes a non-aggregating chromo- or fluorescent mutant of an aggregating *Cnidarian* chromo- or fluorescent protein or mutant thereof, wherein said non-aggregating chromo- or fluorescent mutant comprises a mutation in at least one N-terminal residue codon, wherein said mutation is a substitution of a threonine residue for a lysine residue, an alanine residue for an arginine residue, or a glutamic acid residue for a lysine residue.

22. **(Previously Presented)** The nucleic acid according to Claim 21, wherein said *Cnidarian* chromo-or fluorescent protein is from a non-bioluminescent *Cnidarian* species.

23. **(Previously Presented)** The nucleic acid according to Claim 22, wherein said non-bioluminescent *Cnidarian* species is an Anthozoan species.

24. **(Previously Presented)** The nucleic acid according to Claim 21, wherein said nucleic acid has a nucleotide sequence identical to a nucleotide sequence of at least 10 contiguous nucleotides in length of SEQ ID NOS:14; 15; 17; 19; 21; and 23.

25. **(Previously Presented)** The nucleic acid according to Claim 21, wherein said nucleic acid has a nucleotide sequence similarity of at least about 80% with a nucleotide sequence selected from the group of sequences consisting of SEQ ID NOS:14; 15; 17; 19; 21; and 23.

26. **(Previously Presented)** The nucleic acid according to Claim 21, wherein said nucleic acid has a nucleotide sequence identical to a nucleotide sequence selected from the group of sequences consisting of SEQ ID NOS:14; 15; 17; 19; 21; and 23.

27. **(Previously Presented)** The nucleic acid according to Claim 21, wherein said mutation in at least one N-terminal residue codon is a mutation within about 50 residues of the N-terminus.

28.-31 **(Canceled)**

32. **(Previously Presented)** The nucleic acid according to Claim 27, wherein said mutation in at least one N-terminal residue codon is a mutation in one of residues 2, 3, 4, 5, 6, 7, 8, 9, or 10.

33. **(Canceled)**

34. **(Previously Presented)** A fragment of the nucleic acid according to Claim 21.

35. **(Previously Presented)** A construct comprising a vector and the nucleic acid according to Claim 21.

36. **(Previously Presented)** An expression cassette comprising:

- (a) a transcriptional initiation region functional in an expression host;
- (b) the nucleic acid according to Claim 21; and
- (c) and a transcriptional termination region functional in said expression host.

37. **(Previously Presented)** A cell, or the progeny thereof, comprising an expression cassette according to Claim 36 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell.

38. **(Previously Presented)** A method of producing a chromo- or fluorescent protein, said method comprising:

growing a cell according to Claim 37, whereby said protein is expressed; and  
isolating said protein.

39. **(Previously Presented)** In an application that employs a nucleic acid encoding a chromo- or fluorescent protein, the improvement comprising:  
employing the nucleic acid according to Claim 21.

40. **(Previously Presented)** A kit comprising the nucleic acid according to Claim 21.